```
SEQ ID 2   1 ATG TTG CAG ATG GCT GGG CAG TGC TCC CAA AAT GAA TAT TTT GAC AGT TTG TTG CAT GCT
SEQ ID 1   1▶ M   L   Q   M   A   G   Q   C   S   Q   N   E   Y   F   D   S   L   L   H   A
          61 TGC ATA CCT TGT CAA CTT CGA TGT TCT TCT AAT ACT CCT CCT CTA ACA TGT CAG CGT TAT
          21▶ C   I   P   C   Q   L   R   C   S   S   N   T   P   P   L   T   C   Q   R   Y
         121 TGT AAT GCA AGT GTG ACC AAT TCA GTG AAA GGA ACG AAT GCG ATT CTC TGG ACC TGT TTG
          41▶ C   N   A   S   V   T   N   S   V   K   G   T   N   A   I   L   W   T   C   L
         181 GGA CTG AGC TTA ATA ATT TCT TTG GCA GTT TTC GTG CTA ATG TTT TTG CTA AGG AAG ATA
          61▶ G   L   S   L   I   I   S   L   A   V   F   V   L   M   F   L   L   R   K   I
         241 AGC TCT GAA CCA TTA AAG GAC GAG TTT AAA AAC ACA GGA TCA GGT CTC CTG GGC ATG GCT
          81▶ S   S   E   P   L   K   D   E   F   K   N   T   G   S   G   L   L   G   M   A
         301 AAC ATT GAC CTG GAA AAG AGC AGG ACT GGT GAT GAA ATT ATT CTT CCG AGA GGC CTC GAG
         101▶ N   I   D   L   E   K   S   R   T   G   D   E   I   I   L   P   R   G   L   E
         361 TAC ACG GTG GAA GAA TGC ACC TGT GAA GAC TGC ATC AAG AGC AAA CCG AAG GTC GAC TCT
         121▶ Y   T   V   E   E   C   T   C   E   D   C   I   K   S   K   P   K   V   D   S
         421 GAC CAT TGC TTT CCA CTC CCA GCT ATG GAG GAA GGC GCA ACC ATT CTT GTC ACC ACG AAA
         141▶ D   H   C   F   P   L   P   A   M   E   E   G   A   T   I   L   V   T   T   K
         481 ACG AAT GAC TAT TGC AAG AGC CTG CCA GCT GCT TTG AGT GCT ACG GAG ATA GAG AAA TCA
         161▶ T   N   D   Y   C   K   S   L   P   A   A   L   S   A   T   E   I   E   K   S
         541 ATT TCT GCT AGG TAA
         181▶ I   S   A   R   •
```

FIG. 1

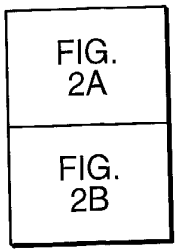


FIG. 2

```
                 1  ATG GAG ACA GAC ACA CTC CTG TTA TGG GTG CTG CTG CTC TGG GTT CCA GGT TCC ACT GGT
                 1▸
SEQ ID 4         1▸ M   E   T   D   T   L   L   L   W   V   L   L   L   W   V   P   G   S   T   G
SEQ ID 3        61  GAC GTC ACG ATG TTG CAG ATG GCT GGG CAG TGC TCC CAA AAT GAA TAT TTT GAC AGT TTG
                                1▸ M   L   Q   M   A   G   Q   C   S   Q   N   E   Y   F   D   S   L
                21▸ D   V   T   M   L   Q   M   A   G   Q   C   S   Q   N   E   Y   F   D   S   L
               121  TTG CAT GCT TGC ATA CCT TGT CAA CTT CGA TGT TCT TCT AAT ACT CCT CCT CTA ACA TGT
                18▸ L   H   A   C   I   P   C   Q   L   R   C   S   S   N   T   P   P   L   T   C
                41▸ L   H   A   C   I   P   C   Q   L   R   C   S   S   N   T   P   P   L   T   C
               181  CAG CGT TAT TGT AAT GCA AGT GTG ACC AAT TCA GTG AAA GGA GTC GAC AAA ACT CAC ACA
                38▸ Q   R   Y   C   N   A   S   V   T   N   S   V   K   G
                61▸ Q   R   Y   C   N   A   S   V   T   N   S   V   K   G   V   D   K   T   H   T
               241  TGC CCA CCG TGC CCA GCA CCT GAA CTC CTG GGG GGA CCG TCA GTC TTC CTC TTC CCC CCA

                81▸ C   P   P   C   P   A   P   E   L   L   G   G   P   S   V   F   L   F   P   P
               301  AAA CCC AAG GAC ACC CTC ATG ATC TCC CGG ACC CCT GAG GTC ACA TGC GTG GTG GTG GAC

               101▸ K   P   K   D   T   L   M   I   S   R   T   P   E   V   T   C   V   V   V   D
               361  GTG AGC CAC GAA GAC CCT GAG GTC AAG TTC AAC TGG TAC GTG GAC GGC GTG GAG GTG CAT

               121▸ V   S   H   E   D   P   E   V   K   F   N   W   Y   V   D   G   V   E   V   H
               421  AAT GCC AAG ACA AAG CCG CGG GAG GAG CAG TAC AAC AGC ACG TAC CGT GTG GTC AGC GTC

               141▸ N   A   K   T   K   P   R   E   E   Q   Y   N   S   T   Y   R   V   V   S   V
               481  CTC ACC GTC CTG CAC CAG GAC TGG CTG AAT GGC AAG GAG TAC AAG TGC AAG GTC TCC AAC
```

FIG. 2A

```
161▸ L   T   V   L   H   Q   D   W   L   N   G   K   E   Y   K   C   K   V   S   N
541  AAA GCC CTC CCA GCC CCC ATC GAG AAA ACC ATC TCC AAA GCC AAA GGG CAG CCC CGA GAA

181▸ K   A   L   P   A   P   I   E   K   T   I   S   K   A   K   G   Q   P   R   E
601  CCA CAG GTG TAC ACC CTG CCC CCA TCC CGG GAT GAG CTG ACC AAG AAC CAG GTC AGC CTG

201▸ P   Q   V   Y   T   L   P   P   S   R   D   E   L   T   K   N   Q   V   S   L
661  ACC TGC CTG GTC AAA GGC TTC TAT CCC AGC GAC ATC GCC GTG GAG TGG GAG AGC AAT GGG

221▸ T   C   L   V   K   G   F   Y   P   S   D   I   A   V   E   W   E   S   N   G
721  CAG CCG GAG AAC AAC TAC AAG ACC ACG CCT CCC GTG TTG GAC TCC GAC GGC TCC TTC TTC

241▸ Q   P   E   N   N   Y   K   T   T   P   P   V   L   D   S   D   G   S   F   F
781  CTC TAC AGC AAG CTC ACC GTG GAC AAG AGC AGG TGG CAG CAG GGG AAC GTC TTC TCA TGC

261▸ L   Y   S   K   L   T   V   D   K   S   R   W   Q   Q   G   N   V   F   S   C
841  TCC GTG ATG CAT GAG GCT CTG CAC AAC CAC TAC ACG CAG AAG AGC CTC TCC CTG TCT CCC

281▸ S   V   M   H   E   A   L   H   N   H   Y   T   Q   K   S   L   S   L   S   P
901  GGG AAA TGA

301▸ G   K   •
```

FIG. 2B

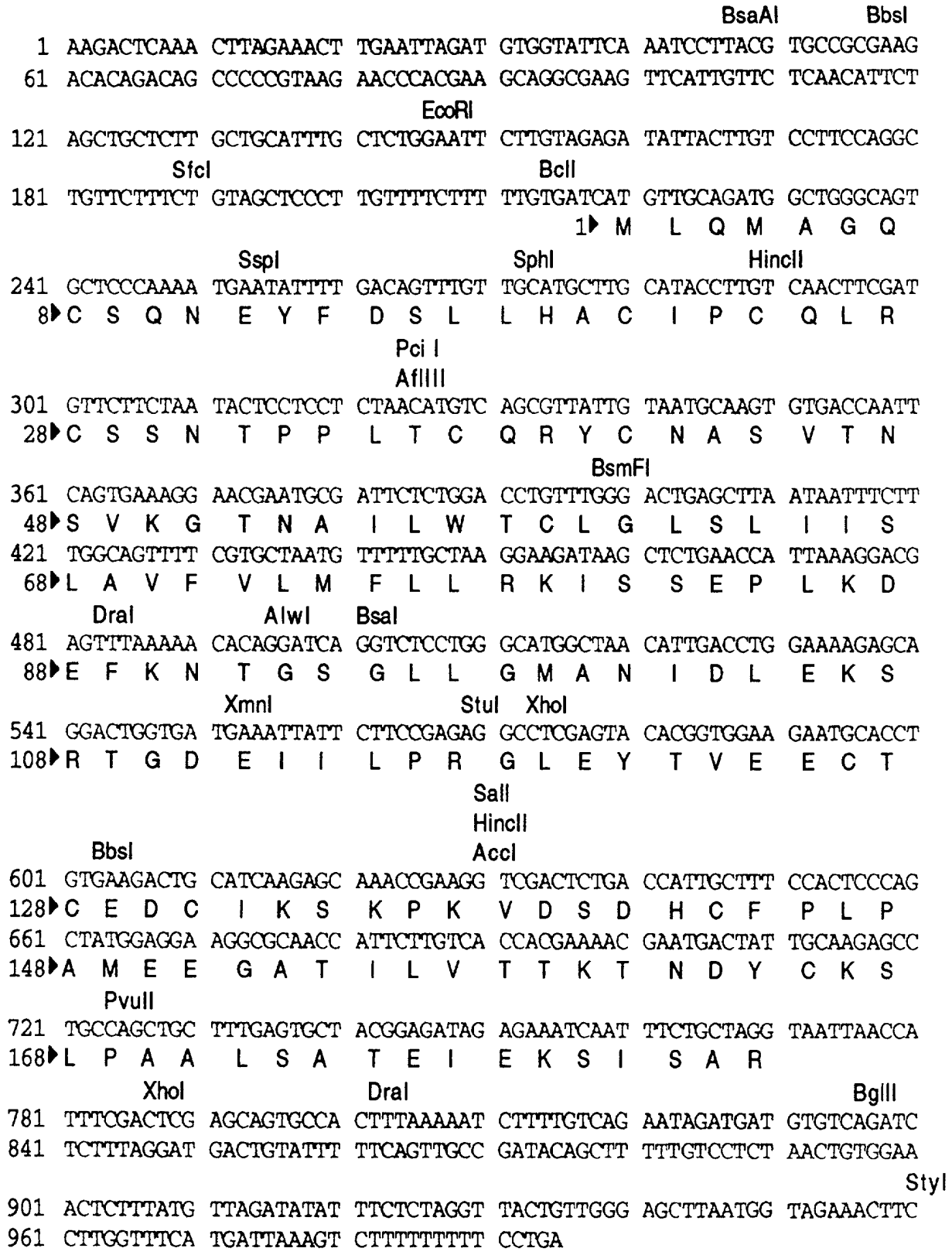

BsaAI
BbsI
EcoRI
SfcI
BclI
SspI
SphI
HincII
PciI
AflIII
BsmFI
DraI
AlwI
BsaI
XmnI
StuI
XhoI
SalI
HincII
AccI
BbsI
PvuII
XhoI
DraI
BglII
StyI

FIG. 3

SRUCTURE COMPARISON BETWEEN TNF-R55 AND BAFF-R

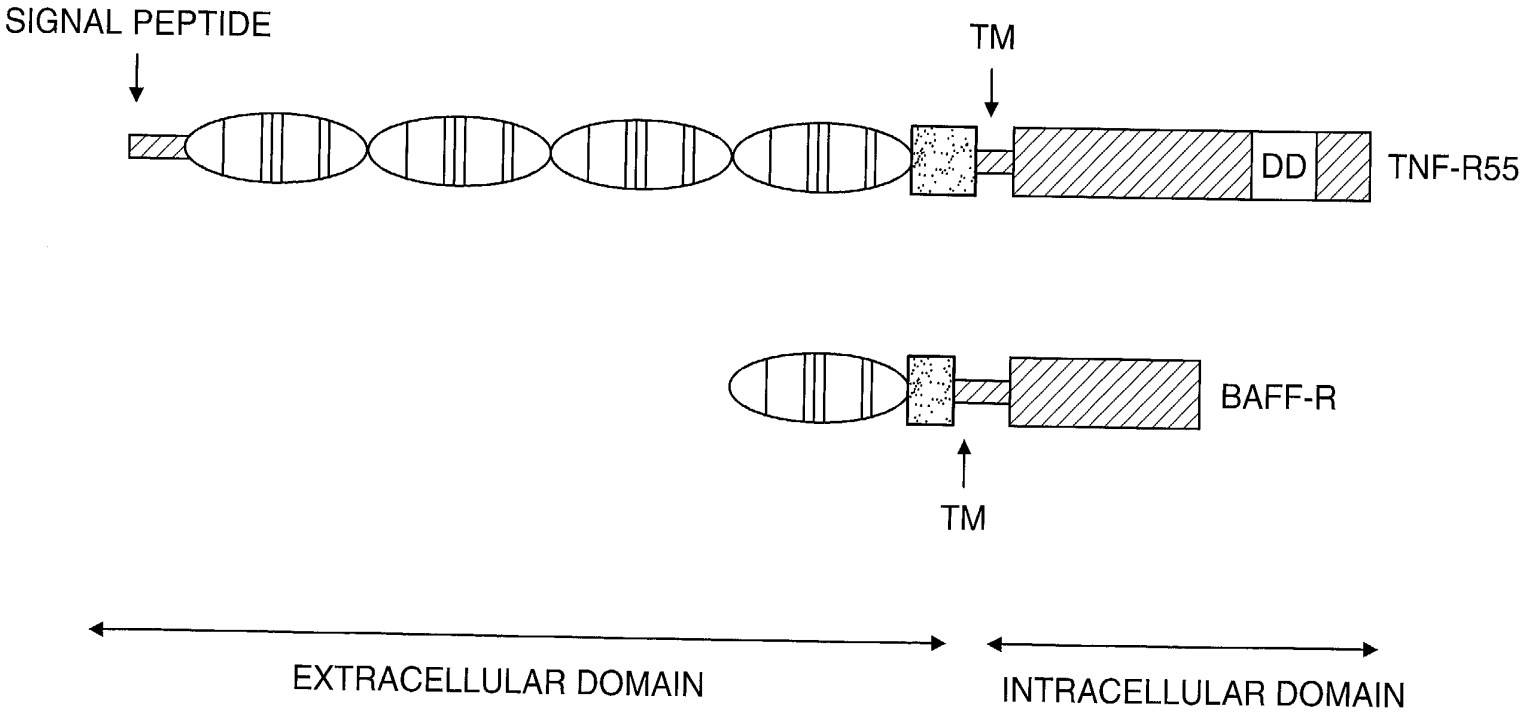


FIG. 4

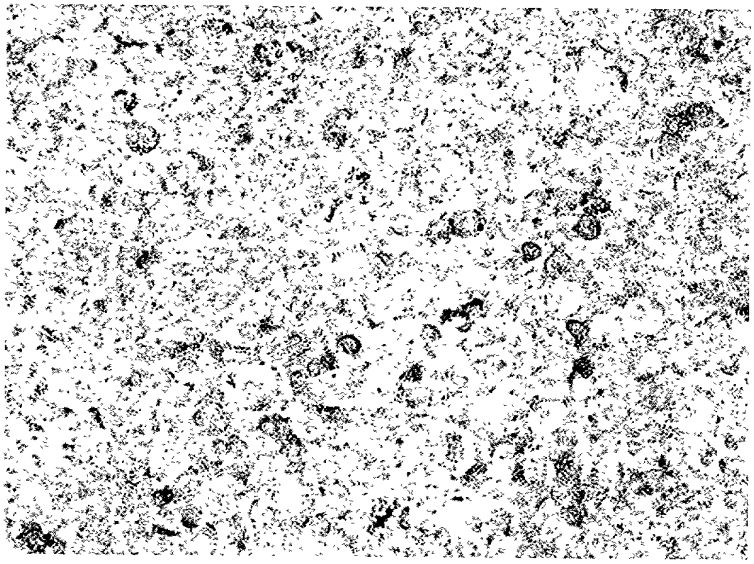


FIG. 5A

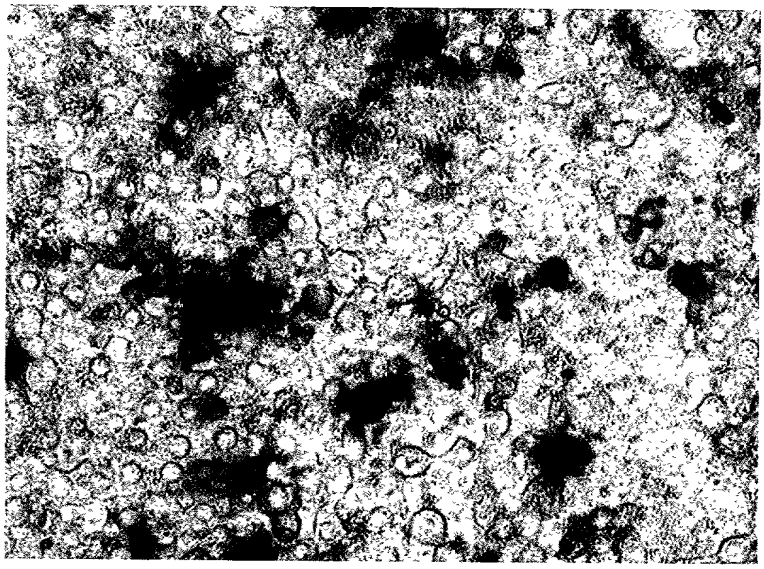


FIG. 5B

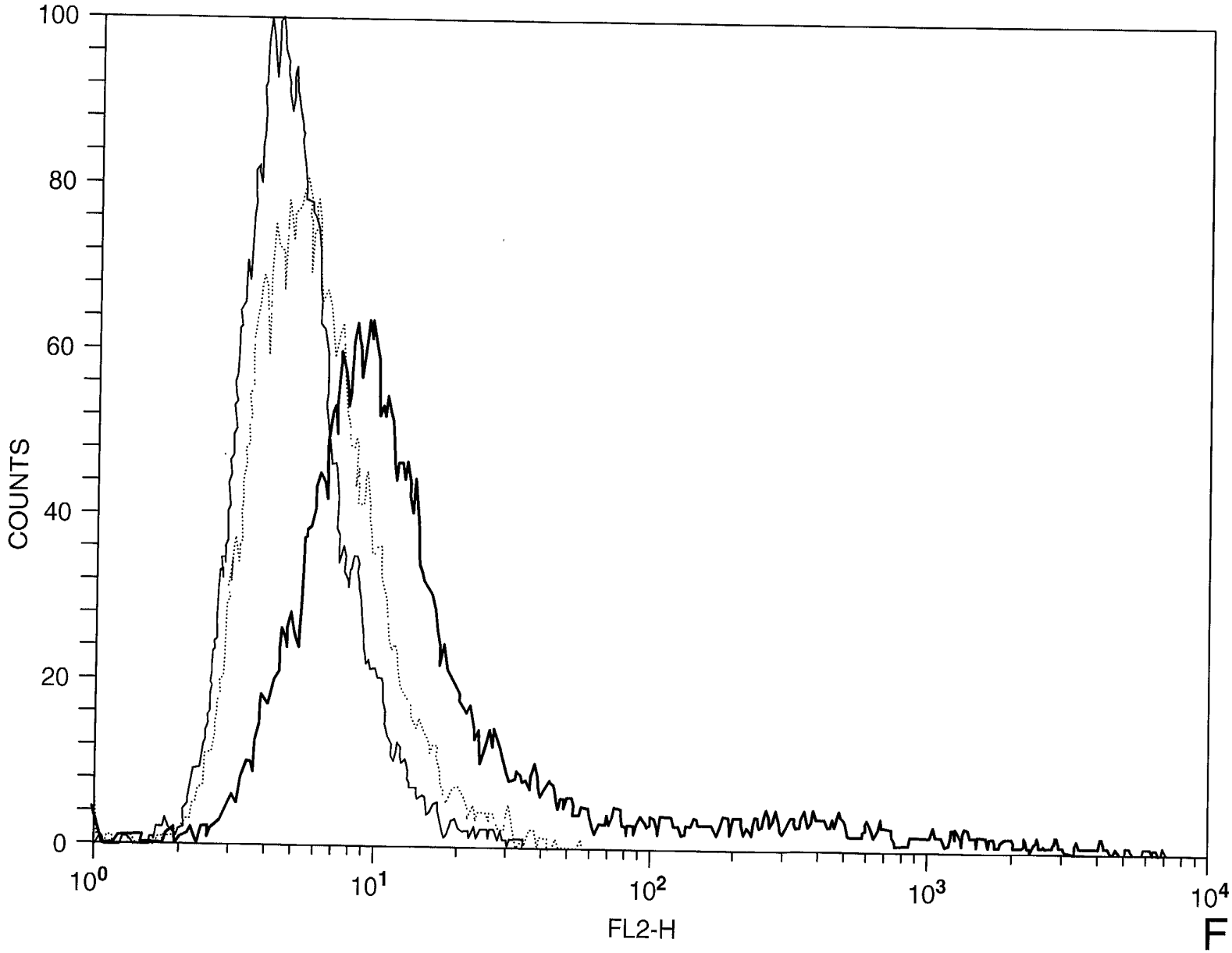
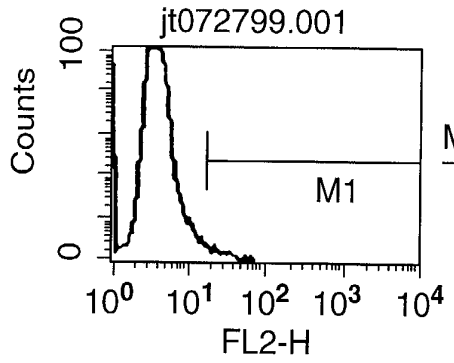
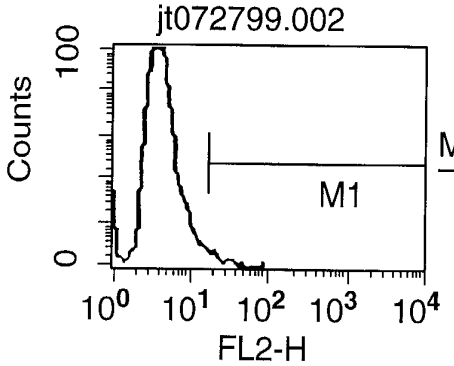


FIG. 6A



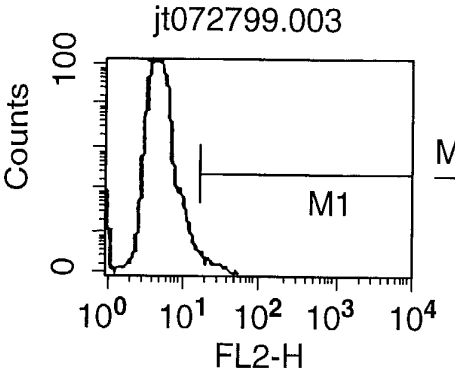
Marker	Left	Right	Events	% Gated	% Total	Mean	Geo Mean	CV	Median
All	1.	9910	10000	100.00	100.00	4.26	3.80	61.34	3.65
M1	17.	9910	65	0.65	0.65	23.23	22.44	30.37	20.35

FIG. 6B-1



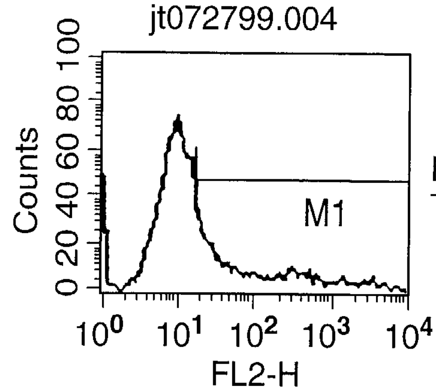
Marker	Left	Right	Events	% Gated	% Total	Mean	Geo Mean	CV	Median
All	1.	9910	10000	100.00	100.00	4.61	4.11	61.98	3.89
M1	17.	9910	79	0.79	0.79	22.88	21.98	34.94	19.63

FIG. 6B-2



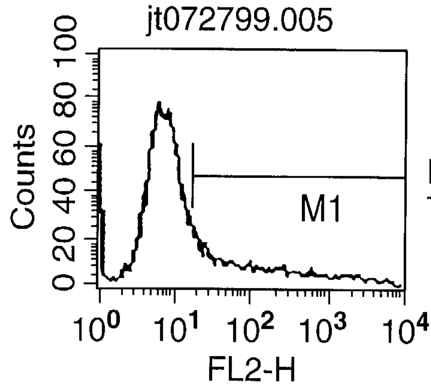
Marker	Left	Right	Events	% Gated	% Total	Mean	Geo Mean	CV	Median
All	1.	9910	10000	100.00	100.00	5.51	4.93	58.41	4.66
M1	17.	9910	130	1.30	1.30	23.55	22.98	23.39	22.57

FIG. 6B-3



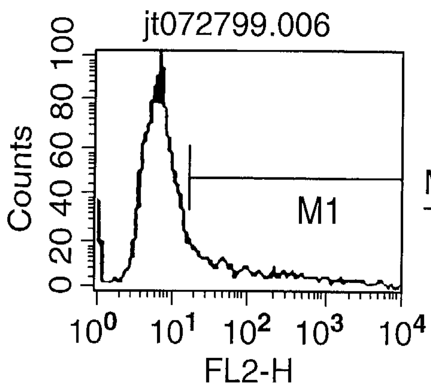
Marker	Left	Right	Events	% Gated	% Total	Mean	Geo Mean	CV	Median
All	1.	9910	10000	100.00	100.00	108.24	15.40	459.27	10.27
M1	17.	9910	2785	27.85	27.85	366.10	85.21	243.61	45.32

FIG. 6B-4



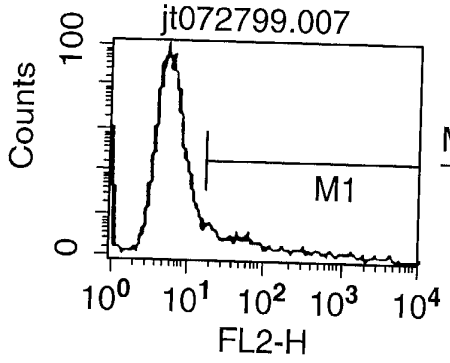
Marker	Left	Right	Events	% Gated	% Total	Mean	Geo Mean	CV	Median
All	1.	9910	10000	100.00	100.00	72.53	11.42	516.47	7.84
M1	17.	9910	2054	20.54	20.54	324.52	88.86	239.37	61.80

FIG. 6B-5



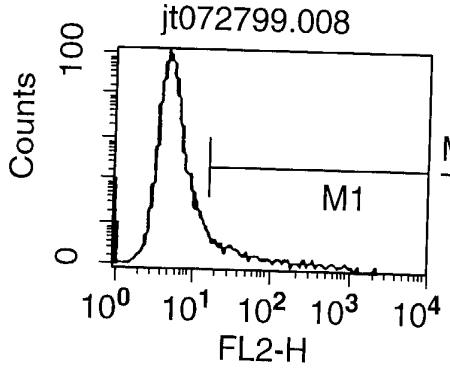
Marker	Left	Right	Events	% Gated	% Total	Mean	Geo Mean	CV	Median
All	1.	9910	10000	100.00	100.00	51.15	9.41	566.98	6.67
M1	17.	9910	1673	16.73	16.73	272.40	81.97	244.63	54.25

FIG. 6B-6



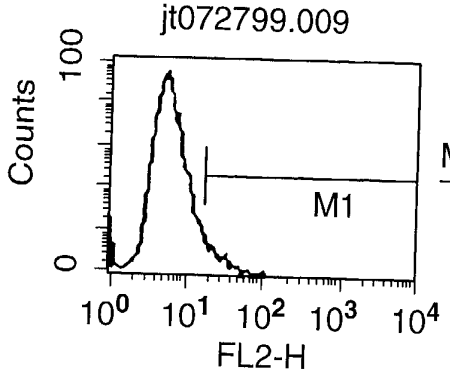
Marker	Left	Right	Events	% Gated	% Total	Mean	Geo Mean	CV	Median
All	1.	9910	10000	100.00	100.00	26.59	7.74	576.94	5.94
M1	17.	9910	1313	13.13	13.13	161.35	60.77	246.67	42.94

FIG. 6B-7



Marker	Left	Right	Events	% Gated	% Total	Mean	Geo Mean	CV	Median
All	1.	9910	10000	100.00	100.00	12.39	6.54	405.32	5.47
M1	17.	9910	876	8.76	8.76	78.94	43.41	195.84	33.68

FIG. 6B-8



Marker	Left	Right	Events	% Gated	% Total	Mean	Geo Mean	CV	Median
All	1.	9910	10000	100.00	100.00	6.99	6.60	69.06	5.67
M1	17.	9910	393	3.93	3.93	24.33	23.31	33.78	21.48

FIG. 6B-9

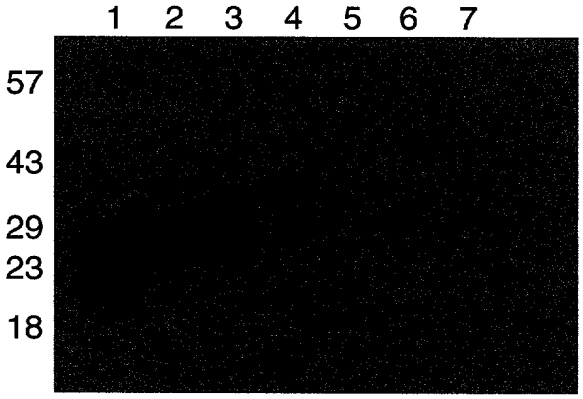

1 2 3 4 5 6 7
57
43
29
23
18

FIG. 7

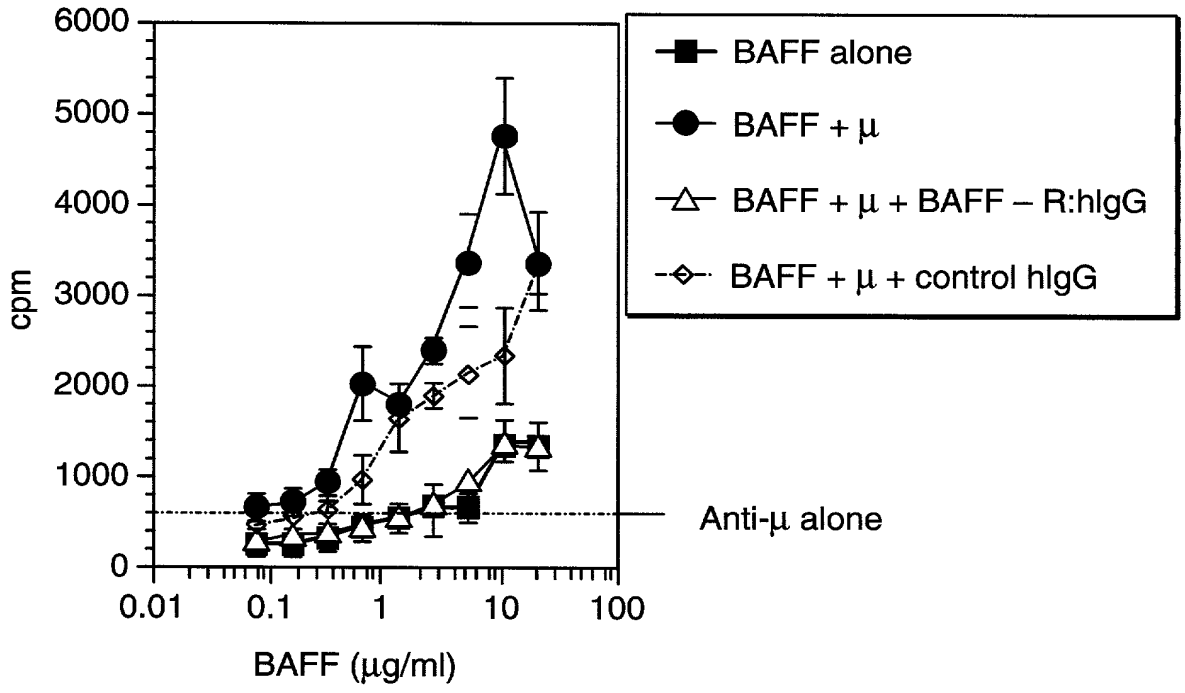

6000
5000
4000
3000
2000
1000
0
cpm
0.01
0.1
1
10
100
BAFF (μg/ml)
BAFF alone
BAFF + μ
BAFF + μ + BAFF – R:hIgG
BAFF + μ + control hIgG
Anti-μ alone

FIG. 8

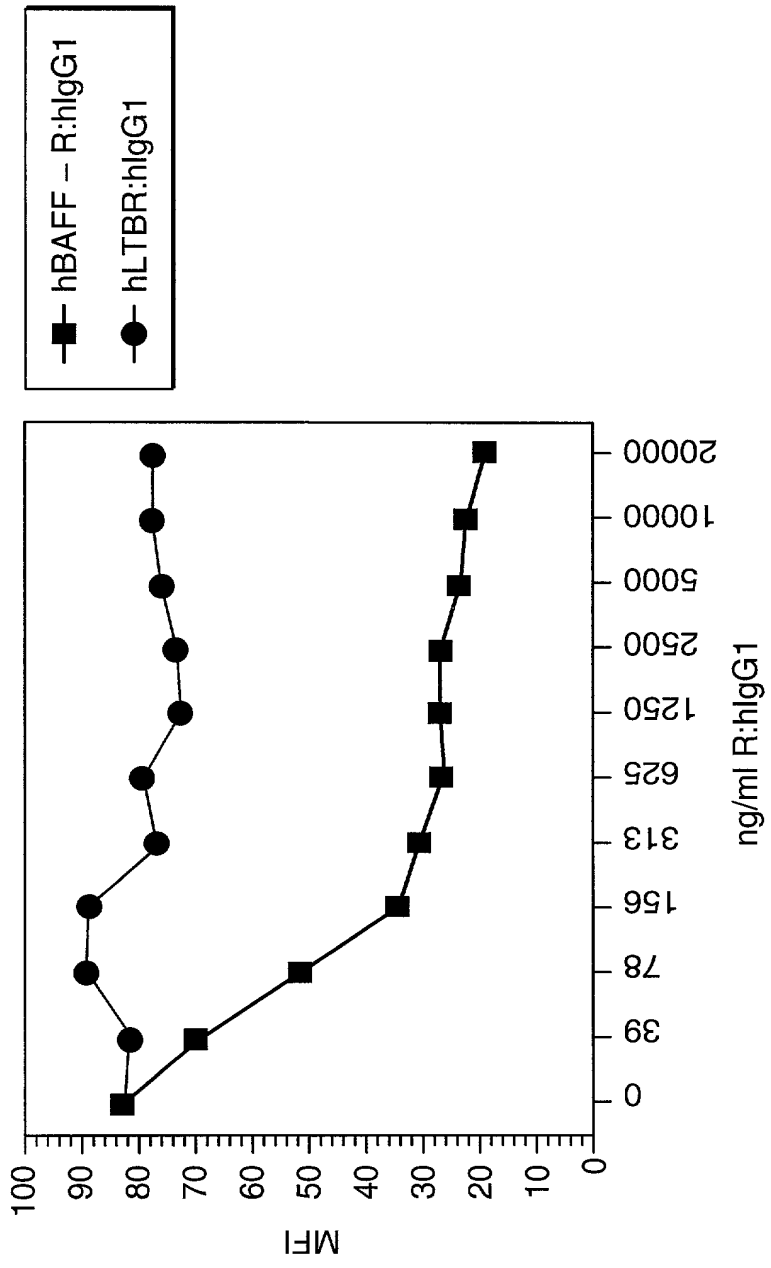

hBAFF – R:hIgG1
hLTBR:hIgG1
MFI
100
90
80
70
60
50
40
30
20
10
0
0
39
78
156
313
625
1250
2500
5000
10000
20000
ng/ml R:hIgG1

FIG. 9

FIG. 10A

BCMA-Ig Treatment Reduces Total CD1^{hi}/IgM^{hi} B Cell Populations in Spleens of Baff Tg Mice

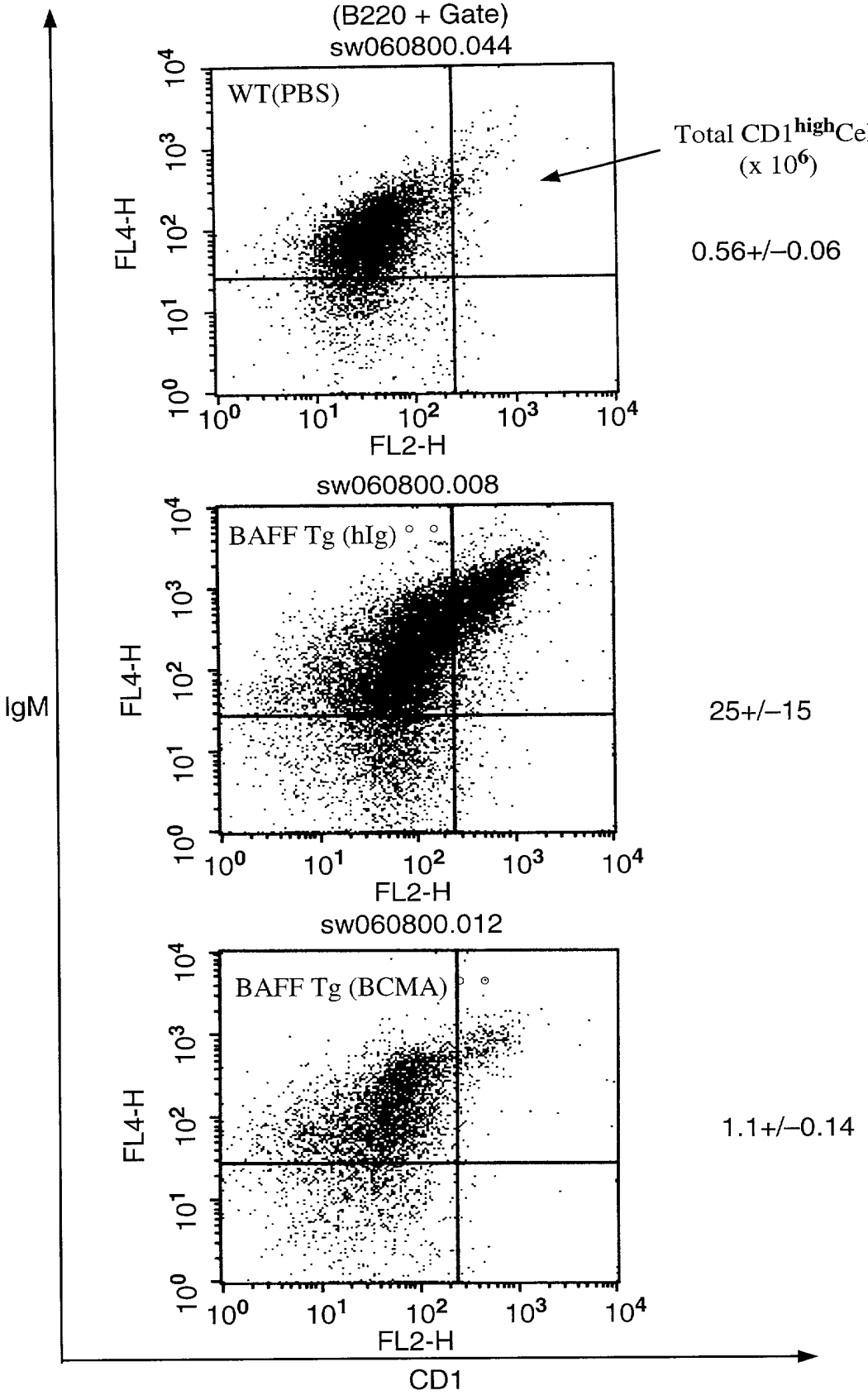
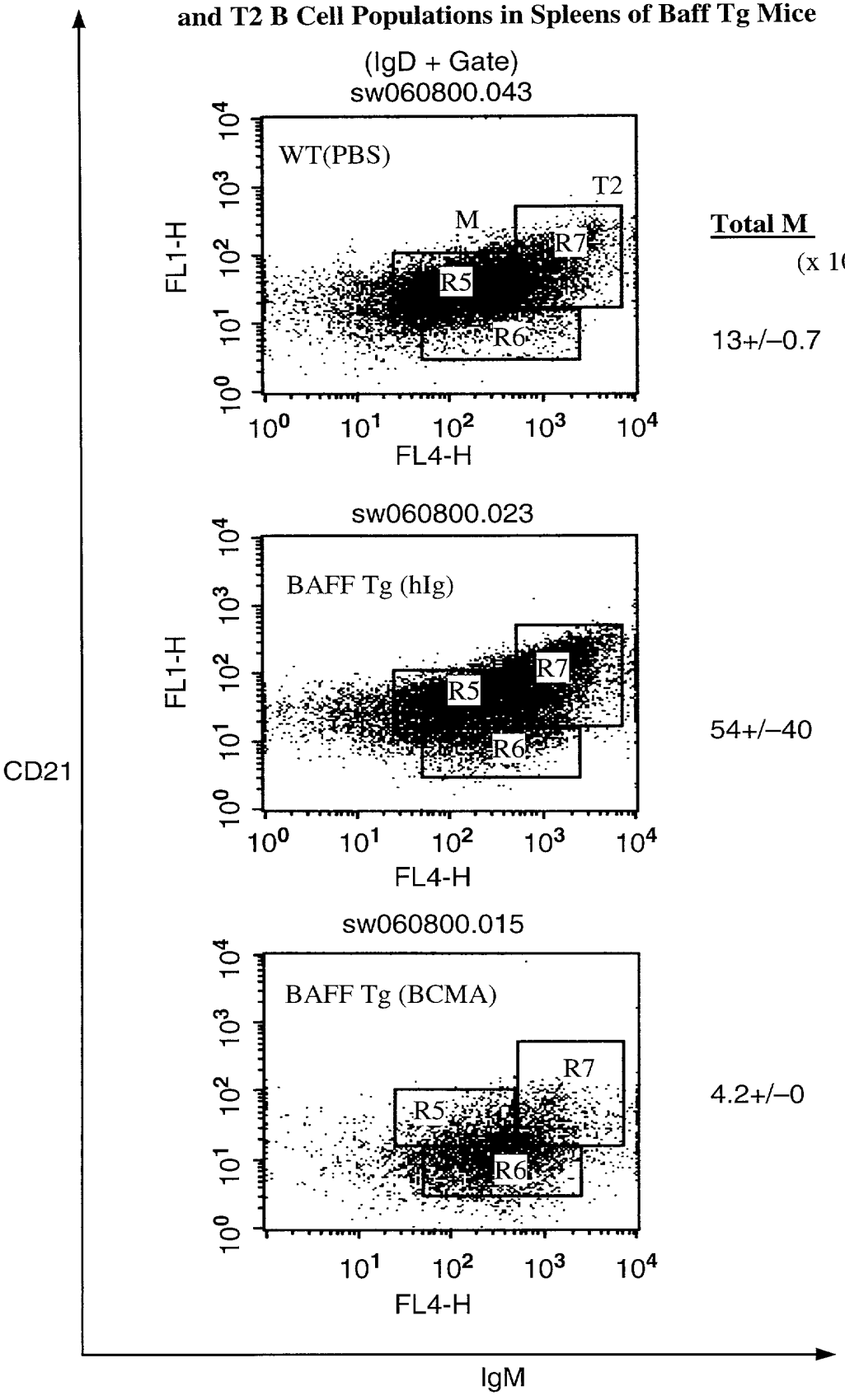


FIG. 10B

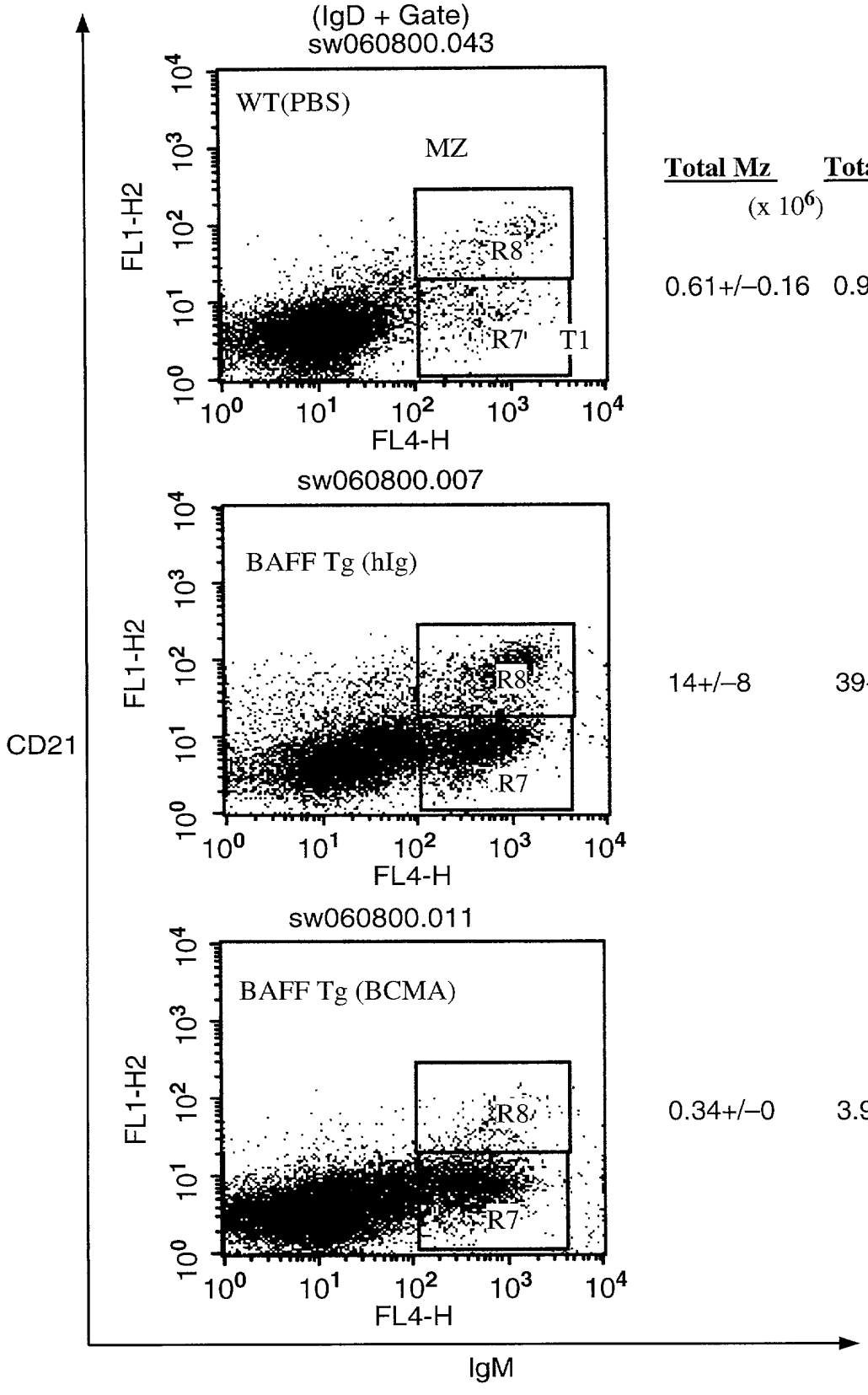
BCMA-Ig Treatment Reduces Total Mature B and T2 B Cell Populations in Spleens of Baff Tg Mice



	Total M (x 10^6)	Total T2 (x 10^6)
WT(PBS)	13+/–0.7	5.7+/–0.63
BAFF Tg (hIg)	54+/–40	41+/–36
BAFF Tg (BCMA)	4.2+/–0	3+/–0.28

FIG. 10C

BCMA-Ig Treatment Reduces Total Marginal Zone and T1 B Cell Populations in Spleens of Baff Tg Mice



	Total Mz (x 10^6)	Total T1
WT(PBS)	0.61+/–0.16	0.94+/–0.08
BAFF Tg (hIg)	14+/–8	39+/–20
BAFF Tg (BCMA)	0.34+/–0	3.9+/–1.8

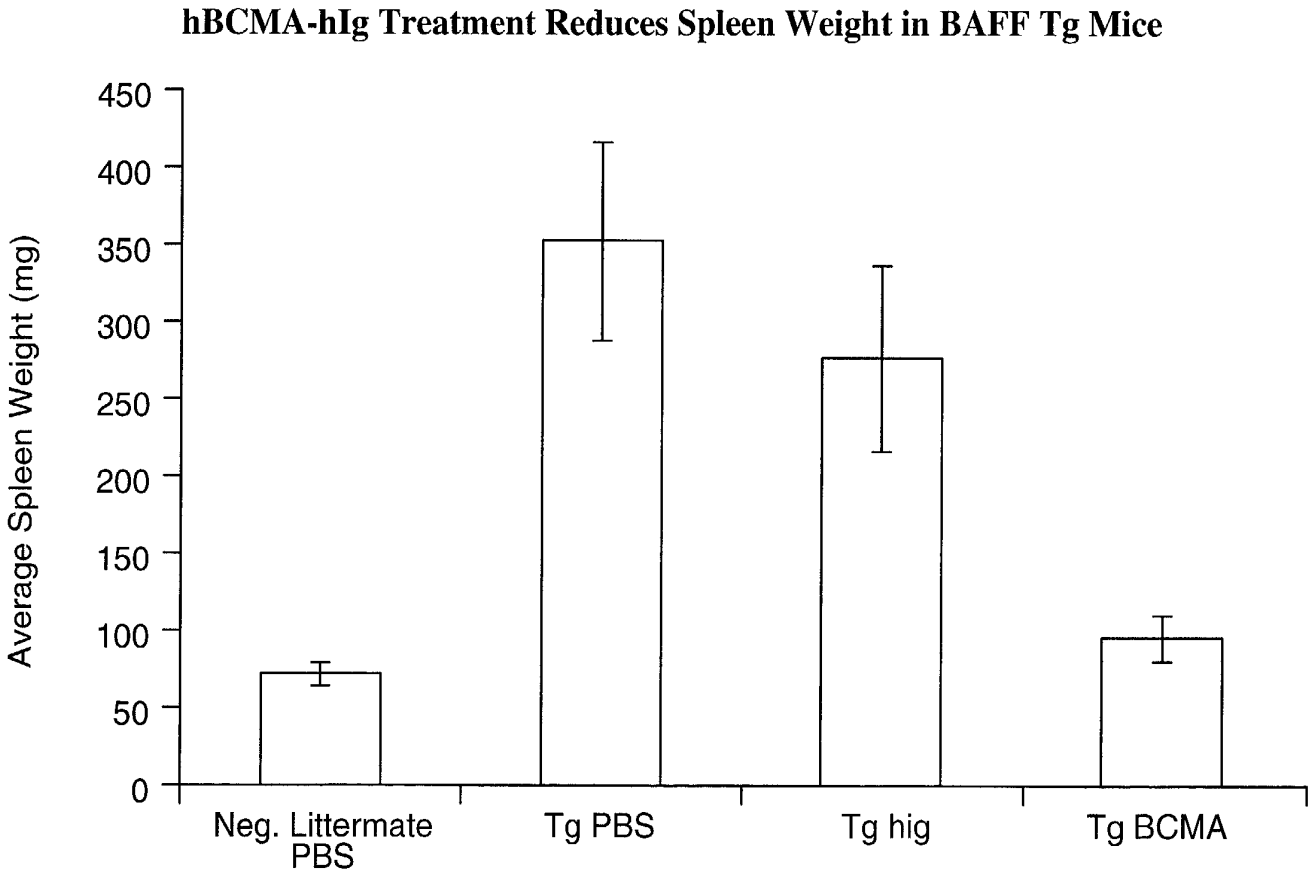


FIG. 11

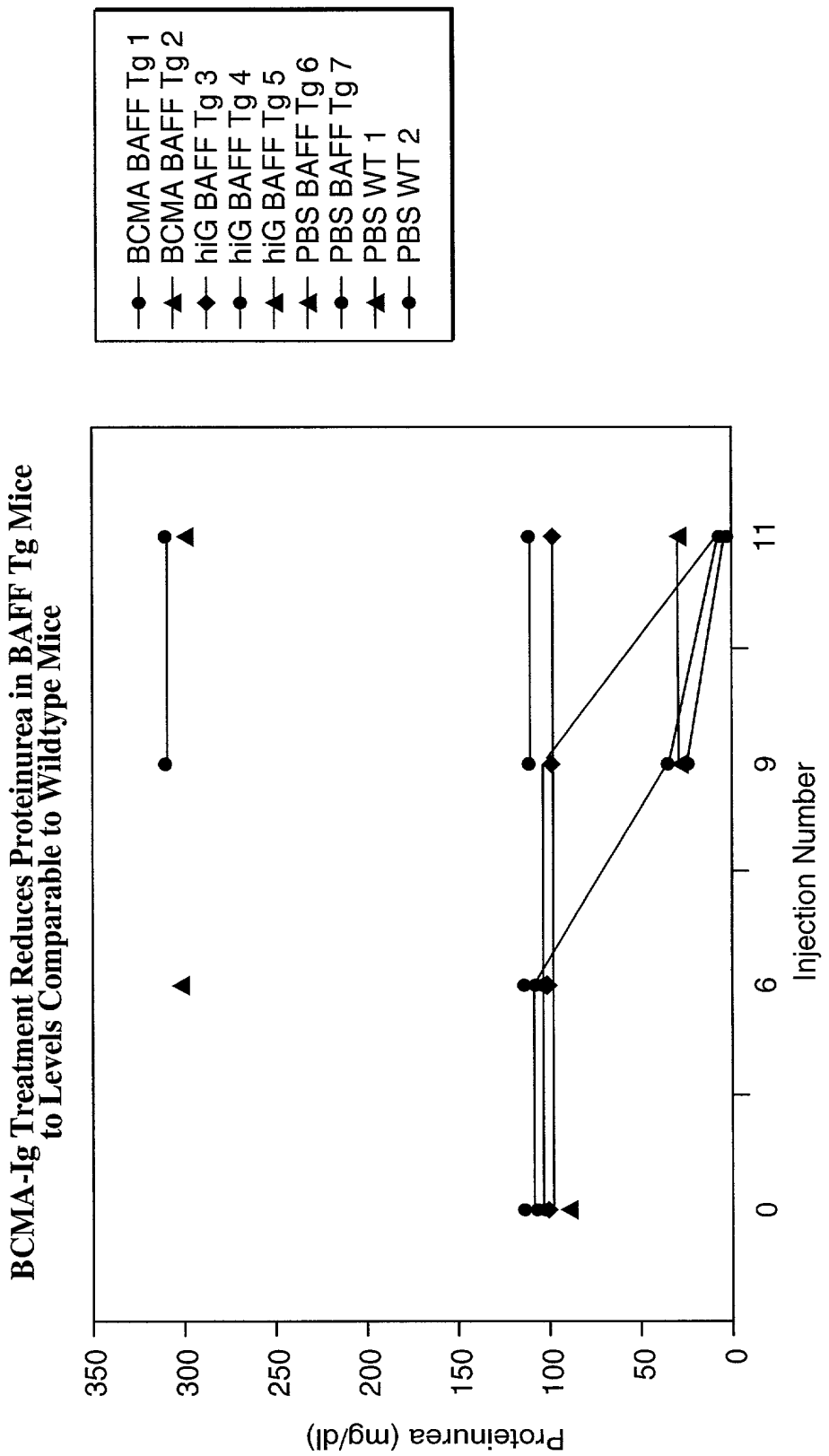

BCMA-Ig Treatment Reduces Proteinurea in BAFF Tg Mice to Levels Comparable to Wildtype Mice
Proteinurea (mg/dl)
350
300
250
200
150
100
50
0
0
6
9
11
Injection Number
BCMA BAFF Tg 1
BCMA BAFF Tg 2
hiG BAFF Tg 3
hiG BAFF Tg 4
hiG BAFF Tg 5
PBS BAFF Tg 6
PBS BAFF Tg 7
PBS WT 1
PBS WT 2

FIG. 12

Average Mean Arterial Pressure in BAFF transgenic (BAFF +) and wild-type controls (BAFF –)

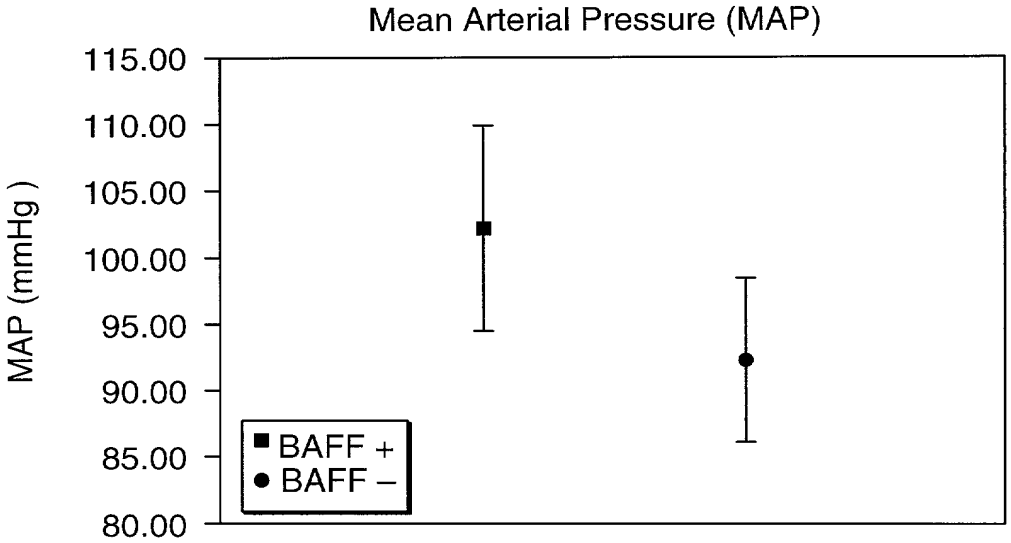


FIG. 13

Individual Mean Arterial Pressure in BAFF transgenic (BAFF +) and wild-type controls (BAFF –)

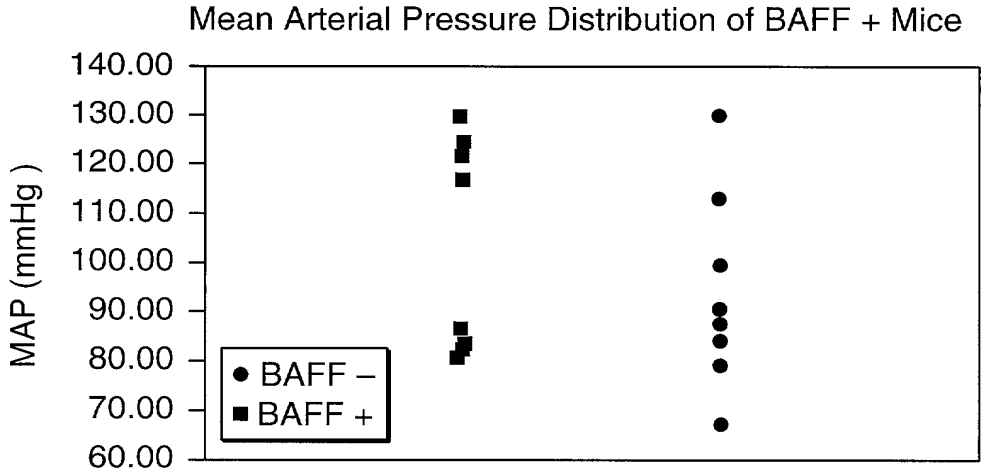


FIG. 14

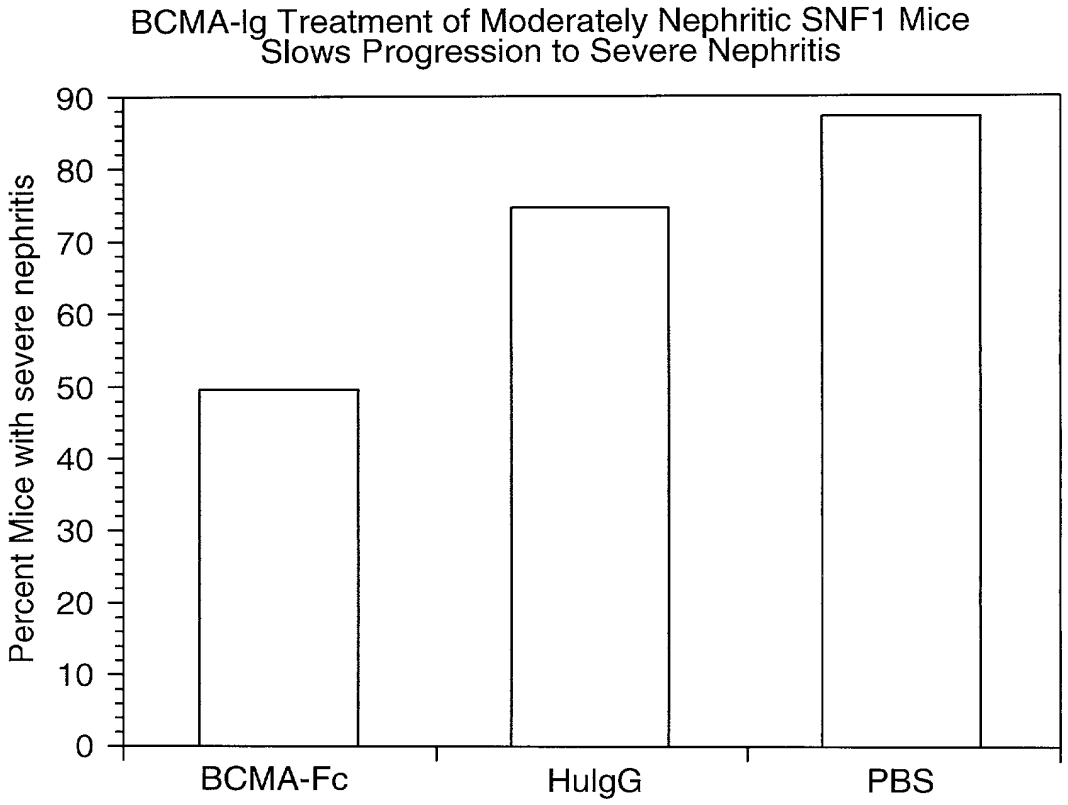

BCMA-Ig Treatment of Moderately Nephritic SNF1 Mice
Slows Progression to Severe Nephritis
Percent Mice with severe nephritis
0
10
20
30
40
50
60
70
80
90
BCMA-Fc
HuIgG
PBS

FIG. 15

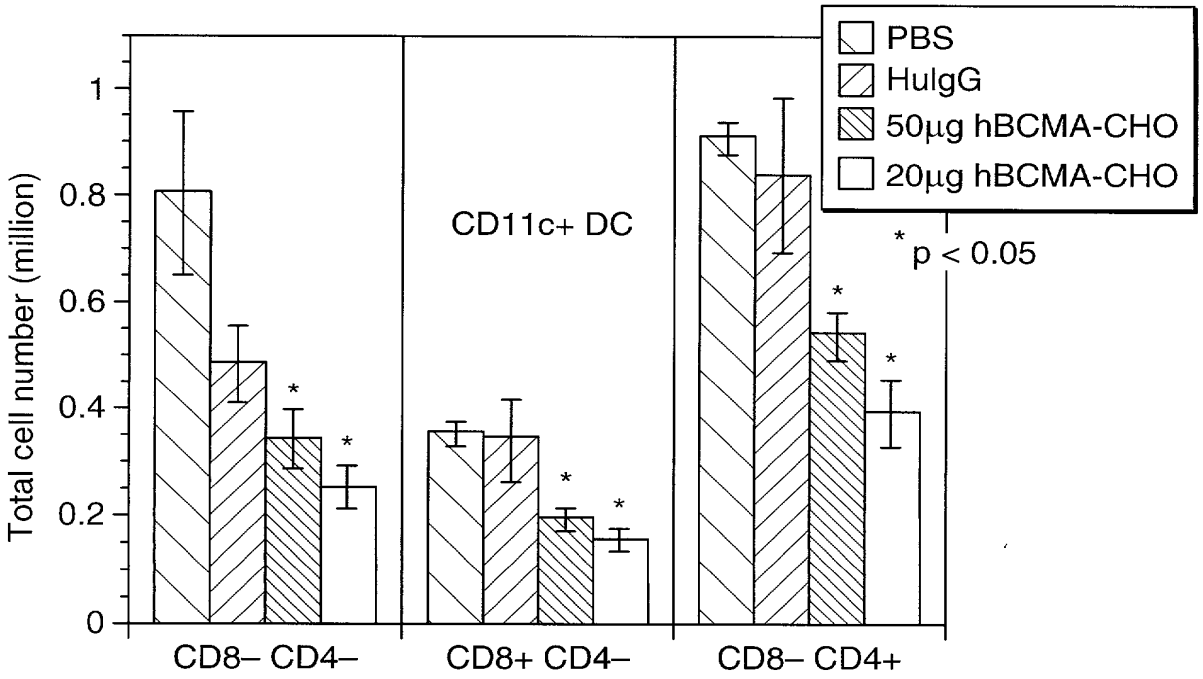

PBS
HuIgG
50μg hBCMA-CHO
20μg hBCMA-CHO
* p < 0.05
CD11c+ DC
Total cell number (million)
0
0.2
0.4
0.6
0.8
1
CD8– CD4–
CD8+ CD4–
CD8– CD4+

FIG. 16